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| 09/960,118                    | 09/21/2001  | Steven R. Pearson    | BEA920010027US1     | 5751             |
| 49056                         | 7590        | 08/07/2007           |                     |                  |
| LIEBERMAN & BRANDSDORFER, LLC |             |                      | EXAMINER            |                  |
| 802 STILL CREEK LANE          |             |                      | FILIPCZYK, MARCIN R |                  |
| GAITHERSBURG, MD 20878        |             |                      |                     |                  |
|                               |             |                      | ART UNIT            | PAPER NUMBER     |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/960,118

**Applicant(s)**

PEARSON, STEVEN R.

**Examiner**

Marc R. Filipczyk

**Art Unit**

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007 and 18 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

This Action is responsive to Applicant's response filed on November 13, 2006

Claims 1-14 are cancelled and new claims 15-32 are submitted for examination.

**To expedite the process of examination Examiner requests that all future correspondences in regard to overcoming prior art rejections or other issues (e.g. amendments, 35 U.S.C. 112, objections and the like) set forth by the Examiner that Applicants provide and link to the most specific page and line numbers of the disclosure where the best support is found (see 35 U.S.C. 132).**

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 18, 2007 has been entered.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth whether the invention accomplishes a practical application and whether it generates a useful, concrete and tangible result.

The guidelines explain that a practical application of a 35 U.S.C. 101 judicial exception is claimed if the claimed invention physically transforms an article or physical object to a different state or thing, or if the claimed invention otherwise produces a useful, concrete, and tangible result.

In the present case, independent claims 15, 21 and 27 do not involve transformation of article or physical object to a different state or thing, they merely recite processing data items. Further, independent claims 15, 21 and 27 do not produce a useful, concrete, and tangible result, but merely attempt to store data to a single output, however this new amended feature is not supported by the disclosure. State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02.

Claims 15, 21 and 27 taken as a whole are directed to a mere method and program listing, i.e., to only its description or expression, is descriptive material per se, do not comprise a practical application as explained above hence are nonstatutory.

Since the claimed invention, as a whole, does not comprise a practical application as explained above, claims 16-20, 22-26 and 28-32 which depend from claims 15, 21 and 27 respectively, are deemed to be directed to non-statutory subject matter.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15, 21 and 27, claim 15 being exemplary, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains

subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter of 1) "creating a binary tree with a root node and multiple external nodes, wherein a quantity of nodes in said tree is equal to a number of input data streams...", 2) "hierarchical manner", 3) "compiling a single output...", 4) "resolving comparison of duplicate identifiers through an identification process", 5) "storing said compiled single output stream on a computer medium..." were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Claims 16-20, 22-26, 28-32 depend from claims 15, 21 and 27, respectively and are therefore rejected on the same basis.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 15, 21 and 27, claim 15 being exemplary, the phrase "external nodes" is indefinite. They are not defined in the disclosure and their metes and bounds are not clear. The term "hierarchy" and "hierarchical manner" are indefinite. Although the general meaning of hierarchy is well known, the concept of promoting data of nodes through a tree in a hierarchical

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manner is not clear as claimed. Further, in the promoting limitation, the segment of “if said status identifiers are unequal...” is indefinite. The limitation/claim is incomplete because it does not account for identifiers being equal. The segment of “compiling a single output” is indefinite. The process of how the compiling is performed to derive a single output is not clear. The phrase, “identification process” is indefinite. It is not clear what the metes and bounds of identification process are. Last, the limitation of “remembering... first data item in a first of said nodes remained in said node” is indefinite. It is not clear what data is remembered and/or how it is used.

Regarding claims 18, 24 and 30, the “term dine” is indefinite. It is not clear what the metes and bounds of dine are.

Claims 16-20, 22-26, 28-32 depend from claims 15, 21 and 27, respectively and are therefore rejected on the same basis.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**Claims 15-32 are rejected under 35 U.S.C. 102(a) as best as Examiner is able to ascertain as being anticipated by Applicant’s Admitted Prior Art (AAPA), Applicant’s Disclosure.**

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Regarding claims 15, 21 and 27, AAPA discloses a method, program and system for implementing replacement selection method: (page 1, lines 5-8 and page 2, lines 11-15, AAPA)

creating a binary tree with a root node and other nodes; (fig. 5A, items 520-525 and see nodes)

processing data items; (fig. 5A)

promoting data items; (fig. 5A, items 520-525 and 510-515)

compiling data streams; (fig. 5A)

processing a single output stream; (page 1, par. 5, lines 1-11)

resolving a data item being processed from a second input stream as being a duplicate of a previously processed data item from a first input stream based on said assigned duplicate data item; (fig. 5A, nodes and page 1, par. 6, lines 3-5, *duplicate*)

processing and promoting data items from said second input stream responsive to said assigned duplicate status identifier (page 1, par. 5, lines 8-11 and par 6, line 4).

*(Note: AAPA teaches any number of input streams represented by the letter N)*

Regarding claims 16-20, 22-26 and 28-32 AAPA discloses all the subject matter claimed in the rejection above, in addition AAPA teaches each node of the selection tree comprises an identifier of one of the input streams, and a reference to a data item being processed from that one of the input streams (fig. 5A, item 500 and nodes), value numbers to signify relationships between the keys (identifiers), see (page 1, par. 6, lines 5-8) and that the method is a replacement selection method using a loser oriented selection tree (fig. 5 and page 1, paragraphs 5 and 6).

***Response to Arguments***

Applicant's arguments filed March 19, 2007 have been fully considered but they are not persuasive. The arguments and responses are listed below.

On page 8, Applicant argues that the amended feature of "single output stream is stored on a computer readable medium" overcomes any non-statutory rejections.

Examiner disagrees. Applicant's disclosure does not support the claimed and argued limitation of "single output stream is stored...". As such, the rejection is maintained.

On page 9, Applicant argues that "creating a binary tree", "hierarchical manner" and "resolving comparison of duplicate identifiers..." is enabling and provides citations from the specification. In addition, regarding "compiling a single output", Applicant argues that it was present in prior versions of the claims and that the issue should have been raised in prior Office Action.

Examiner disagrees. Regarding the rejected limitations, Applicant's broad citations do not meet the burden of establishing that the subject matter rejected and argued above is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Examiner has reviewed all the originally filed claims and disclosure and has not found support for the current claims including "compiling a single output". As such, the rejection is maintained.



On page 10, Applicant argues that the claimed limitation of “if said status identifiers are unequal” is definite and defines unequal to mean not match. Further, Applicant claims that “hierarchical manner” is definite.

Examiner disagrees. The argued limitation is indefinite because it renders the entire claim incomplete. The claim does not account for all conditions encountered in trying to use the invention. As to “hierarchical manner”, the limitation is indefinite because the structure is not clearly claimed.

On page 10, Applicant argues that the rejected feature of “identification process” has now been removed and “remembering” is definite.

Examiner disagrees. The limitation comprising “identification process” is present in the claims. As to the term “remembering”, it is not clearly claimed and it is further not clear what data is remembered by what component/storage.

On page 12, Applicant argues that AAPA does not teach “remembering” and “switching data streams”, and that figure 5A of the instant Application is not prior art.

Examiner disagrees. The present claims are rejected as best understood by the Examiner. The pending claims try to claim a computer replacement selection method for 3 or more input data streams, or a plurality of streams. The AAPA submitted by the Applicants also teaches a computer replacement selection method by building a binary selection tree over a plurality of input streams, as seen in fig. 5 (page 1, lines 5-8 and 9-11, Instant Application). As to terms switching and remembering, they are not clearly claimed, in addition, switching of data and

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remembering data values is performed in a computer replacement method as described in the background art by the Applicant.

With respect to all the pending claims 15-32, Examiner respectfully traverses Applicants assertion based on the discussion and rejection above.

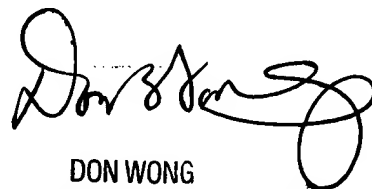
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc R. Filipczyk whose telephone number is (571) 272-4019. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MF  
August 3, 2007



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